# PHARMACEUTICAL MICROBIOLOGY – I

<u>AUTHOR</u> Ms. Ankita Tripathi<sup>123</sup>

<u>CO-AUTHORS</u> Ms. Pooja Chaurasia<sup>423</sup> Ms. Priya Pandey<sup>423</sup> Mr. Akansha Pandey<sup>123</sup> Mr. Vimal Datt<sup>423</sup>

<sup>1</sup>Associate Professor, <sup>4</sup>Assistant Professor – III <sup>2</sup>Department of Pharmacy <sup>3</sup>IIMT College of Pharmacy, G.Noida, UP, INDIA

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# PREFACE

The textbook of 'Pharmaceutical Microbiology' specifically aims at the ever-demanding thoughtful need of an absolutely well-documented compilation of factual details theoretical principles. classifications. related to: diagrammatic profiles, graphic presentations, critical explanation, and latest examples for the Pharmacy Degree (B. Pharm.,) throughout the Indian Universities. SAARCcountries, and similar curricula adopted abroad. Modern invigorative society, based on the overwhelming and overemphasized broad-spectrum importance viruses' utilities of 'Microbiology' profusely gets benefited from the intricate species of scores of microorganisms in several ways and means, namely: antibiotics, vaccines, enzymes, vitamins etc. Nevertheless, a quantum-leap-forward in the field of 'Modern Biotechnology' rests predominantly upon reasonably sound microbiological foundation. Besides, microorganisms do modulate a plethora of vital and critical functionalities, such as: (a) enable completion of cycles of C, O, N and S which essentially occur in both terrestrial and aquatic systems; (b) provide absolutely indispensable components of prevailing ecosystem; and (c) serve as a critical source of 'nutrients' occurring at the grass-root of practically a large segment of ecological food webs and chains. The entire course-content presented in 'Pharmaceutical Microbiology' has been meticulously and painstakingly developed and expanded as per the AICTE-Approved Syllabus–2000. Each chapter has been duly expressed in a simple, lucid, and crisp language easily comprehensible by its august readers. A unique largely acceptable style of presentation has been adopted. viz., brief introduction, principles, labeled figures, graphics, diagrams of equipments, descriptions, explanations, pharmaceutical applications. and selected classical examples. Each chapter is duly elaborated with adequate

foot-notes, references, and 'further reading references' at the end.

The text material essentially embodies not only an ample emphasis on the vivid coverage of fundamental principles of microbiology as a scientific discipline but also maintains a manageable length for the apprehension of brilliant students.

🗷 Ms. Ankita Tripathi

# ACKNOWLEDGEMENT

The work of a book or a study can never be executed with one or two people, but with the team work and help of the experts. Our book has compiled with the team work and the righteous advises of our guides, other Pharmacy professionals.

Firstly, we would like to expand our genuine appreciation and thankfulness to IIMT College of Pharmacy, for giving us a chance of writing this book.

We give regard and express our gratitude to our Director Sir, who kept an eye on our work and gave all his support and inspiration which kept us motivated to finish our work duly. We are fortunate enough under his dynamic vision, truthfulness and direction.

We would also like to show our gratitude to our parents, families and friends their supports. We are indebted to all the peer reviewers who with their hard work have made this Book a possible outcome.

At the end, we just want to add that this Book is the result of lots of sleepless nights, labored days.

Thanking everyone who made it possible.

🗷 Ms. Ankita Tripathi

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